## IN THE CLAIMS

Please amend the claims as follows:

Claims 1-8 (Canceled).

Claim 9 (Currently Amended): A novel olefin mixture preparable by process the following steps a), b) and c) of the process of claim 1,

subjecting a C<sub>4</sub>-olefin mixture to metathesis,

separating off olefins having from 5 to 8 carbon atoms from the metathesis mixture,
subjecting the separated-off olefins individually or as a mixture to dimerization to
give olefin mixtures having from 10 to 16 carbon atoms,

wherein

- a) the components have from 10 to 16 carbon atoms
- b) the proportion of unbranched olefins is less than 25% by weight
- c) the proportion of components having a structural element of the formula I (vinylidene group)

$$A^1$$
  $C=CH_2$  (I)

wherein A1 and A2 represent aliphatic hydrocarbon groups, is below 10 by weight

Claim 10 (Original): An olefin mixture as claimed in claim 9, which has a proportion of unbranched olefins of less than 20% by weight.

Claim 11 (Currently Amended): An olefin mixture as claimed in one of claims 9 and 10 claim 9, wherein at least 80% of the components of the dimerization mixture have, in the range from 1/4 to 3/4, preferably from 1/3 to 2/3, of the chain length of their main chain, one branch, or two branches to adjacent carbon atoms.

Claim 12 (Currently Amended): An olefin mixture as claimed in one of claims 9 to 11 claim 9, wherein, at the branching sites of the main chain, predominantly groups having (y-4) and (y-5) carbon atoms are bonded, where y is the number of carbon atoms in the monomer used for the dimerization.

Claim 13 (Currently Amended): An olefin mixture as claimed in one of claims 9 to 12 claim 9, wherein the ratio of aliphatic to olefinic hydrogen atoms is in the range

 $H_{\text{aliph.}}: H_{\text{olefin.}} = (2*n-0.5): 0.5 \text{ to } (2*n-1.9): 1.9, \text{ where n is the number of carbon}$  atoms in the olefin obtained in the dimerization.

Claim 14 (Currently Amended): An olefin mixture as claimed in one of claims 9 to 13 claim 9, wherein the ratio of aliphatic to olefinic hydrogen atoms is in the range

$$H_{aliph.}: H_{olefin.} = (2*n-1.0): 1 \text{ to } (2*n-1.6): 1.6.$$

Claims 15-20 (Cancelled).

Claim 21 (New): A novel surfactant alcohol obtainable by the following steps subjecting a C<sub>4</sub>-olefin mixture to metathesis; separating off olefins having from 5 to 8 carbon atoms from the metathesis mixture;

subjecting the separated-off olefins individually or as a mixture to dimerization to give olefin mixtures having from 10 to 16 carbon atoms;

subjecting the resulting olefin mixture, optionally after fractionation, to derivatization to give a mixture of surfactant alcohols; and optionally

alkoxylating the surfactant alcohols; wherein the novel surfactant

- a) has 11 to 17 carbon atoms and
- b) comprises a proportion of unbranched alcohols of below 25 % by weight, and its alkoxylation products.

Claim 22 (New): A method of altering surface tension of liquids by adding the nonionic surfactant alcohol alkoxylation products of claim 21.

Claim 23 (New): A method for the preparation of surfactants comprising chemically modifying the surfactant alcohol of claim 21.

Claim 24 (New): A method according to claim 17 comprising single or multiple reaction (glycosylation, polyglycosylation) of said surfactant alcohol with mono-, di- or polysaccharides with the exclusion of water and with acid catalysis or with O-acetylsaccharide halides.

Claim 25 (New): A method according to claim 23, comprising:

esterification of said surfactant alcohol with sulfuric acid or sulfuric acid derivatives to give acidic alkyl sulfates or alkyl ether sulfates.

Claim 26 (New): A method according to claim 23, comprising esterification of said surfactant alcohol with phosphoric acid or its derivatives to give acidic alkyl phosphates or alkyl ether phosphates.

Claim 27 (New): An olefin mixture as claimed in claim 9, wherein at least 80% of the components of the dimerization mixture have, in the range from 1/3 to 2/3, of the chain length of their main chain, one branch, or two branches to adjacent carbon atoms.